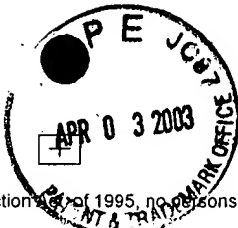


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Application Number		09/817,696			
Filing Date		Herewith			
First Named Inventor		Howard R. Test, et al.			
Group Art Unit		2815			
Examiner Name		Richards, N.D.			
Attorney Docket No.		TI-30589			
Sheet	1	of	2		

U.S. PATENT DOCUMENTS						
Exam. Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
WSP	AA	4,808,769		Nakano, et al.	02/28/1989	
WSP	AB	4,857,671		Nakano, et al.	08/15/1989	
WSP	AC	4,970,571		Yamakawa, et al.	11/13/1990	
WSP	AD	5,212,138		Krulik, et al.	05/18/1993	
WSP	AE	5,291,374		Hirata, et al.	03/01/1994	
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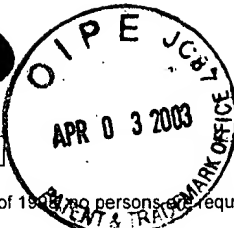
FOREIGN PATENT DOCUMENTS								
Exam. Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁵
		Office ³	Number ⁴	Kind Code ² (if known)				
WSP	BA		JP 411140658 A		Hitachi Chem Co. Ltd.	25/05/1999		
	BB							
	BC							
	BD							

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				Examiner Name	Richards, N.D.
				Attorney Docket No.	TI-30589
Sheet	2	Of	2		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Exam. Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
ND	CA	"A Low-Cost Electroless Plating Method for Producing Flip-Chip Bondable and Wire-Bondable Circuit Pads for Smart Pixel Application", Madhumita Datta, et al., IEEE, Laboratory of Physical Sciences, and Dept. of Electrical Engineering, 1998, pp. 99-100		
ND	CB	"Autocatalytic Gold Plating Process for Electronic Packaging Applications", John G. Gaudiello, IEEE, Electronic Components and Technology Conference, 1995, pp. 534-537		
ND	CC	"Break Through Developments in Electroless Nickel/Gold Plating on Copper Based Semiconductors", Andrew J. G. Strandjord, et al., 2000 International Symposium on Advanced Packaging Materials, 2001, pp. 107-111		
ND	CD	"Contact and Connection Properties of Autocatalytically 16.1 Increased Gold-Deposits", R. Freudenberger, et al., Proceedings of the Forty-Second IEEE Holm Conference on Electrical Contacts, 1996, Joint with the 18 th International Conference on Electrical Contacts, 1996, pp. 461-466		
ND	CE	"Crystallization of Electroless Ni-P Under Bump Metallization Induced by Solder Reaction", J. W. Jang, et al., 1999 International Symposium on Advanced Packaging Materials, pp. 252-255		
ND	CF	"Direct Electroless Nickel Plating on Copper Circuits Using DMAB as a Second Reducing Agent", Hideto Watanabe, et al., 1998 IEMT/IMC Proceedings, pp. 149-153		
ND	CG	"Electrolessly Deposited Diffusion Barriers for Microelectronics", E. J. O'Sullivan, et al., IBM J. Res. Develop., Vol. 42, No. 5, 09/1998, pp. 607-620		
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ND	CI	"Electroless Palladium Finish For Bonding Fine-Pitch Devices", George M. Milad, et al., Proceedings of the Technical Program, NEPCON West '96 Conference, 02/1996, pp. 1333-1341		
ND	CJ	"Flip Chip Technologies", HBS Mark II Automatic Electroless Nickel/Immersion Gold Plate Tool, Technical Proposal #990505-2, OSH, 05/1999, pp. 3-11		
ND	CK	"Low Cost Flip Chip Bumping Technologies", CL Wong, et al., IEEE/CPMT Electronic Packaging Technology Conference, 1997, pp. 244-250		
ND	CL	"Metallization for Direct Solder Interconnection of Power Devices", Shatil Haque, et al., 2000 Electronic Components and Technology Conference, pp. 1475-1482		
ND	CM	"Performance of Evaporated and Plated Bumps", Addi Mistry, et al., 1998 IEEE/CPMT International Electronics Manufacturing Technology Symposium, pp. 1-7		
ND	CN	"Solder Flip Chips Employing Electroless Nickel: An Evaluation of Reliability and Cost", Frank Stepniak, InterPACK '97 Final Draft, pp. 1-6		
ND	CO	"Thermosonic Gold Ball Bonding to Alternate Plating Finishes on Laminate MCM Substrates", Chris Dunn, et al., 1997 International Conference on Multichip Modules, 1997, pp. 170-176		
ND	CP	"Thermosonic Gold Wire Bonding to Palladium Finishes on Laminate Substrates", R. Wayne Johnson, et al., 1998 International Conference on Multichip Modules and High Density Packaging, pp. 291-299		
ND	CQ	"Thermosonic Gold Wirebonding to Electrolessly-Metallized Copper Bondpads Over Benzocyclobutene", Richard Ulrich, et al., 1999 International Conference on High Density Packaging and MCMs, pp. 260-265		
	CR			

Examiner Signature		Date Considered	4/17/00
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